

Claims

1. A non-human mammal, which stably retains a DNA encoding a heterologous PPAR α in an expressible state and has one or more
5 different genetic modifications, or a part of its living body.
2. The animal or the part of its living body of claim 1,
wherein at least one of said different genetic modifications
results in pathological condition(s) equal or similar to
10 disease(s) associated with the regulation of PPAR α activity.
3. The animal or the part of its living body of claim 1,
wherein at least one of said different genetic modifications is
introduction of a foreign DNA under the control of a promoter
15 having PPRE.
4. The animal or the part of its living body of claim 1,
wherein said heterologous PPAR α is human derived PPAR α .
- 20 5. The animal or the part of its living body of claim 1,
wherein said heterologous PPAR α has the same or substantially
the same amino acid sequence as the amino acid sequence
represented by SEQ ID NO: 2.
- 25 6. The animal or the part of its living body of claim 1,
wherein said non-human mammal is rabbit, dog, cat, guinea pig,
hamster, mouse or rat.
7. The animal or the part of its living body of claim 1,
30 wherein said non-human mammal is mouse.
8. The animal or the part of its living body of claim 1,
wherein said animal expresses said heterologous PPAR α in place
of lacking its endogenous PPAR α .

9. The animal or the part of its living body of claim 8,
wherein said animal is obtainable by crossing an endogenous
PPAR α -deficient animal and the same species of animal that
5 expresses a heterologous PPAR α .

10. The animal or the part of its living body of claim 8,
wherein said endogenous PPAR α is mouse-derived PPAR α and said
heterologous PPAR α is human-derived PPAR α .

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11. The animal or the part of its living body of claim 2,
wherein said diseases associated with the regulation of PPAR α
activity are one or more diseases selected from the group
consisting of hyperlipidemia, hypertriglyceridemia, combined
15 dyslipidemia, hypo-HDL-cholesterolemia, arteriosclerosis,
peripheral arterial obstruction, intermittent claudication,
gangrene, hypertension, thrombosis, ischemic heart disease,
acute myocardial infarction, heart failure, congestive heart
failure, unstable angina pectoris, post-PTCA restenosis, post-
20 stenting restenosis, hyperfibrinogenemia, cardiomyopathy,
cerebral hemorrhage, transient ischemic attack, cerebral
infarction, cerebral apoplexy, chronic glomerulonephritis,
diabetic nephropathy, renal arteriosclerosis, dermatitis,
immunodeficiency, hypoglycemia, hypoketonemia, fatty liver,
25 diabetes mellitus, diabetic neuropathy, diabetic retinopathy,
obesity, Alzheimer's disease, anemic hypoxia, gonadal
dysfunction, liver cancer, breast cancer and endometritis.

12. The animal or the part of its living body of claim 1,
30 wherein said heterologous PPAR α is specifically expressed in
one or more region selected from the group consisting of liver,
heart, kidney, adrenal gland, blood vessel, gastrointestinal
tract and brain.

13. The animal or the part of its living body of claim 1, wherein said heterologous PPAR α is specifically expressed in liver.

5 14. A method of screening for an agonist or antagonist for a heterologous PPAR α , which comprises applying a test substance to the animal or the part of its living body of claim 1, and assaying its agonistic or antagonistic activity against the heterologous PPAR α .

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15 15. A method of screening for an agonist or antagonist for a heterologous PPAR α , which comprises applying a test substance to the animal or the part of its living body of claim 3, and assaying its agonistic or antagonistic activity against the heterologous PPAR α using the expression of a foreign DNA under the control of a promoter having PPRE as an index.

16. A method of screening for a substance having a prophylactic/therapeutic activity for disease(s) associated with the regulation of PPAR α activity in an animal from which a heterologous PPAR α is derived, which comprises administering a test substance to the animal of claim 2, and assaying effect(s) of the substance on pathological condition(s) equal or similar to disease(s) associated with the regulation of PPAR α activity in the animal.

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